

OCTOPODS FROM THE R/V PILLSBURY SOUTHWESTERN
CARIBBEAN CRUISE, 1966, WITH A DESCRIPTION
OF A NEW SPECIES, *OCTOPUS ZONATUS*¹

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ABSTRACT

A new species of barred octopus is described from material collected aboard the R/V PILLSBURY from off the Caribbean coast of Colombia. It is compared with its nearest relative, *O. chierchiae* from the tropical eastern Pacific. Descriptions are accompanied by detailed illustrations. Also recorded are: *O. defilippi* Verany, *O. joubini* Robson, *O. vulgaris* Cuvier, and *Benthoctopus januarii* Hoyle. A new key to the known shallow-water octopods of the western Atlantic is included.

INTRODUCTION

In 1966, a cruise was conducted aboard the research vessel JOHN ELLIOTT PILLSBURY in the southwestern Caribbean Sea as part of the long-range investigations of the shallow- and deep-sea fauna of the tropical Atlantic, research supported by the National Geographic Society—University of Miami Deep-Sea Biological Program. During the course of the cruise, 140 stations were occupied between Cartagena, Colombia, and Escudo de Veraguas, Panamá, ranging in depths from the shore to over 2,970 meters. An account of the cruise and station data, and a description of the gear used have been given by the writer (Voss, 1966). Octopods were taken at eleven stations. They consisted of thirteen specimens representing two genera and five species, one of which is new to science.

The cephalopods of the western part of the Caribbean Sea and Central America are very poorly known. To the knowledge of the writer, no reference is made in the literature to the octopods of the southwestern Caribbean. The results obtained and reported upon here should therefore serve as a basis for further study of this fauna. With the possible construction of a sea-level canal connecting the waters of the Gulf of Panamá and Caribbean (Voss *et al.*, 1967) a knowledge of the present faunas is essential if we are to understand the resultant faunistic changes and evolutionary import. This is especially true in the case of *Octopus zonatus* which closely resembles a species, *Octopus chierchiae*, that inhabits the Gulf of Panamá and adjacent waters.

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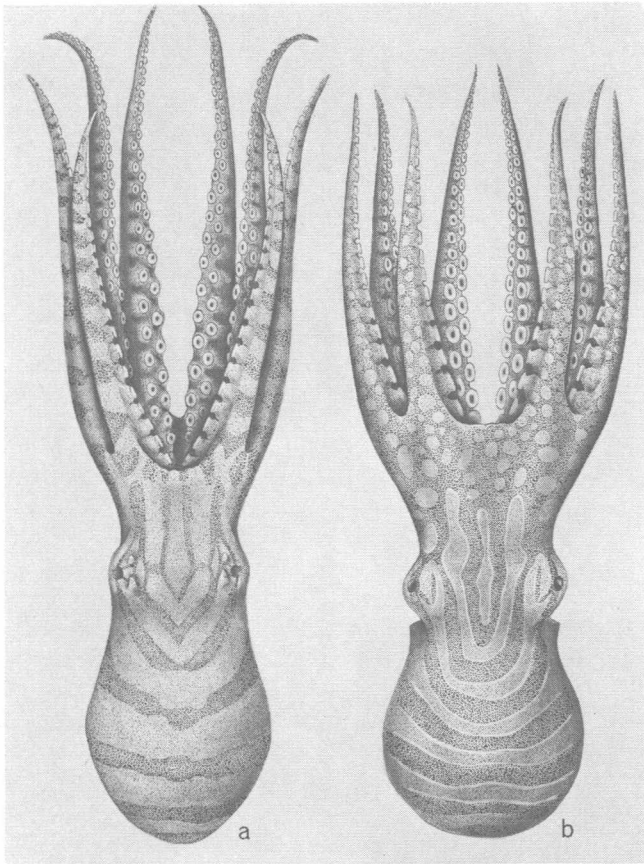


FIGURE 1. a, *Octopus zonatus*, new species. Female, mantle length 30.0 mm, from Sta. P-366. Dorsal view showing color pattern taken from slides. b, *Octopus chierchiaie* Jatta, female from Sta. P-492. Dorsal view showing color pattern taken from animal and slides.

I wish to thank my colleagues Drs. F. M. Bayer and C. Richard Robins who both participated in the cruise and handled many of the arduous duties upon which its success depended, Drs. Lipke Holthuis and Anthony J. Provenzano, and the graduate students of the Institute of Marine Sciences who participated in the cruise, made the collections, and contributed so greatly to its success. In particular I wish to thank Mr. E. T. LaRoe, one of my graduate students in cephalopod biology and systematics, who was largely responsible for the care, handling, and preserving of cephalopods collected and who made many observations and color notes on the living

specimens. The measurements and indices given in this paper are those defined by Pickford (1945) and Pickford & McConnaughey (1949). The illustrations were executed by Constance Stolen, to whom grateful thanks are extended.

***Octopus zonatus*, new species**

Figs. 1a; 2a-f, 2i; 3a-e, 3k-l; 4a-d, 4g

Material Studied.—**HOLOTYPE**: Male, mantle length 19.0 mm (fixed in formalin, preserved in alcohol), Sta. P-402, in 73 meters with 10-ft otter trawl, off Punta Caribana (8°51.2'N, 77°01.6'W), July 17, 1966.

PARATYPES: 1 male, mantle length 14.0 mm, 1 female, mantle length 30.0 mm, Sta. P-366, in 33-37 meters with 10-ft otter trawl, off Punta Venados, Colombia (9°31.0'N, 75°59.5'W), July 13, 1966. 1 female, mantle length 19.5 mm, Sta. P-352, in 51-55 meters with 40-ft otter trawl, Gulf of Urabá (Darién) (8°20.1'N, 76°53.6'W), July 11, 1966. 1 female, mantle length 14.0 mm, Sta. P-368, in 37 meters with 10-ft otter trawl, off Tolú, Colombia (9°31.2'N, 75°41.1'W), July 13, 1966.

Description.—On the basis of present knowledge this is a species of small octopus. The mantle length of the males, both with spermatophores, is from 14.0 to 19.0 mm. The females ranged in mantle length from 14.0 to 30.0 mm, but only the largest was gravid. There is a possibility, therefore, that the males may be smaller at maturity than the females; the males certainly attain maturity at a smaller size.

The mantle wall is muscular and thick. The mantle is large, slightly oval to round, somewhat narrower than long, with a MWI of from 65.7 to 95.0. The posterior end is rounded. In the young and in the males the neck region is inconspicuous, but in the large female it is narrow.

The funnel is large, tubular, and free for about half of its length. The funnel organ is W-shaped, the median section rather stout, the lateral limbs slender and pointed. The median anterior projection in all specimens examined had a notch or split at the end but this may have been due to preservation.

The head is narrow (HWI 50.0-71.3), with medium-sized, protuberant eyes.

The web is moderately shallow (WDI 31.0-40.3), deeper in the smaller specimens. The web formula is either CDEBA or DCEBA with sector A always the shallowest. The web does not appear to extend up either side of the arms.

The brachial crown is strong, moderately developed but not massive. The arms are of medium length (ALI 54.8-66.4, MAI 49.7-58.2) and rather stout (AWI 15.9-27.0) and taper to slender points. The suckers are in two rows, closely spaced along the entire length of the arms. The

TABLE 1
MEASUREMENTS (IN MM) OF 2 MALES AND 3 FEMALES OF *Octopus zonatus*,
NEW SPECIES

| Character | Holotype | | Paratypes | | | | | | | |
|------------------|----------|------|-----------|------|-------|------|-------|------|-------|------|
| Sta. No. | P-402 | | P-366 | | P-368 | | P-352 | | P-364 | |
| Sex | ♂ | | ♂ | | ♀ | | ♀ | | ♀ | |
| Mantle length | 19.0 | | 14.0 | | 14.0 | | 19.5 | | 30.0 | |
| Mantle width | 14.0 | | 12.2 | | 11.2 | | 18.5 | | 19.7 | |
| Head width | 11.0 | | 10.0 | | 9.0 | | 12.0 | | 15.0 | |
| Arm lengths: | L. | R. | L. | R. | L. | R. | L. | R. | L. | R. |
| I | 26+ | 34.0 | 24.5 | 24.0 | 20.0 | 20.0 | 33.0 | 36.0 | 46.0 | 45.0 |
| II | 23+ | 33.0 | 24.0 | 18.0 | 22.0 | 22.0 | 36.5 | 37.5 | 52.5 | 53.0 |
| III | 17+ | 29.0 | 26.0 | 25.5 | 23.0 | 23.0 | 39.2 | 39.0 | 54.5 | 58.0 |
| IV | 41.0 | 39+ | 23+ | 26.0 | 23.5 | 24.0 | 39.2 | 38.0 | 57+ | 58.0 |
| Hect. arm length | 29.0 | | 25.5 | | — | | — | | — | |
| Ligula length | 2.88 | | 1.6 | | — | | — | | — | |
| Calamus length | 1.3 | | 0.64 | | — | | — | | — | |
| Sucker diameter | 1.6 | | 1.44 | | — | | 2.0 | | 2.2 | |
| Arm width | 3.7 | | 3.0 | | 2.9 | | 3.1 | | 5.0 | |
| No. of gills | 6+ | | 6+ | | 7 | | 6+ | | 6+ | |
| Total length | 62.0 | | 40.0 | | 38.0 | | 59.0 | | 88.0 | |
| Web depth: | | | CDEBA | | | | CDEBA | | DCEBA | |
| A | — | | 5.5 | | — | | 8.0 | | 9.0 | |
| B | — | | 7.0 | | — | | 10.5 | | 13.5 | |
| C | 12.5 | | 10.5 | | — | | 13.5 | | 16.0 | |
| D | — | | 10.0 | | — | | 13.2 | | 18.0 | |
| E | — | | 9.0 | | — | | 12.2 | | 15.5 | |

suckers are of moderate size (SnDI 7.3-10.3) and about the same in both sexes. There is no indication of specially enlarged suckers in the males.

Both males, as remarked above, are small (ML 14.0-19.0 mm), so features described here may change somewhat with added growth. The hectocotylized arm is only slightly shorter than the others (HAI 85.3-98.0). It is bordered on the ventral side by a small but distinct membrane or extension of the web which forms the spermatophoral groove and extends to the ligula.

The ligula is small (LLI 6.3-9.5). It consists of a groove with raised, slightly inrolled edges and a broad median ridge with faint traces of transverse rugae; it is slender and pointed. The calamus stands erect and is less than half the ligula length (CLI 45.00-4.00).

The gills are small with 6-7 well-formed lamellae on the outer demibranch

TABLE 2

MANTLE LENGTH, NUMBER OF PRIMARY GILL LAMELLAE, INDICES OF BODILY PROPORTIONS, AND SPERMATOPHORE CHARACTERISTICS FOR *Octopus zonatus*

| Character | Holotype | | Paratypes | | |
|-----------|----------|------|-----------|------|------|
| Sex | ♂ | ♂ | ♀ | ♀ | ♀ |
| ML | 19.0 | 14.0 | 14.0 | 19.5 | 30.0 |
| MWI | 73.7 | 87.0 | 80.0 | 95.0 | 65.7 |
| HWI | 57.9 | 71.3 | 64.2 | 61.5 | 50.0 |
| ALI | 54.8 | 65.0 | 63.2 | 66.4 | 66.0 |
| MAI | 55.8 | 53.8 | 58.2 | 49.7 | 51.7 |
| AWI | 19.5 | 21.4 | 27.0 | 15.9 | 16.7 |
| WDI | 36.8 | 40.3 | — | 34.4 | 31.0 |
| SnDI | 8.4 | 10.3 | — | 10.3 | 7.3 |
| Gills | 6+ | 6+ | 7 | 6+ | 6+ |
| HAI | 85.3 | 98.0 | — | — | — |
| LLI | 9.5 | 6.3 | — | — | — |
| CLI | 45.0 | 40.0 | — | — | — |
| PLI | 21.6 | — | — | — | — |
| SpL | 11.2 | — | — | — | — |
| SpLI | 58.9 | — | — | — | — |
| SpMI | 32.1 | — | — | — | — |

and two or three minute lamellae terminally on the projecting gill stalk. I have not before seen this type of arrangement with a distinct demarcation between "mature" and "immature" lamellae.

The digestive tract of the large female was dissected. The buccal mass is comparatively small with two small anterior salivary glands. The oesophagus is short and bordered posteriorly by the two somewhat triangular posterior salivary glands. The oesophagus opens into a large crop about at its midportion. The crop tapers only slightly to lead into the small, muscular stomach. The spiral caecum is large, striated, and thin walled, with two ducts leading to the liver. The intestine is thin walled, and does not appear to be differentiated. Within the funnel, it terminates at the anal opening bordered by lateral flaps. The ink sac is small and set superficially into the liver; it communicates with the intestine by a slender ink duct that terminates just within the anus.

The female genitalia consist of a large, round, posterior ovary with paired oviducts. The proximal oviducts are larger and thicker than the distal oviducts, but about equal them in length. The oviducal glands are dark bluish gray and flattened.

The eggs are large and elongate oval in shape. They are about 6.1 mm long by 2.8 mm wide with a short stalk about 0.3 mm in length. Unlike the other shallow-water cephalopods of the western Atlantic they are strongly longitudinally striated, as shown in the figure.

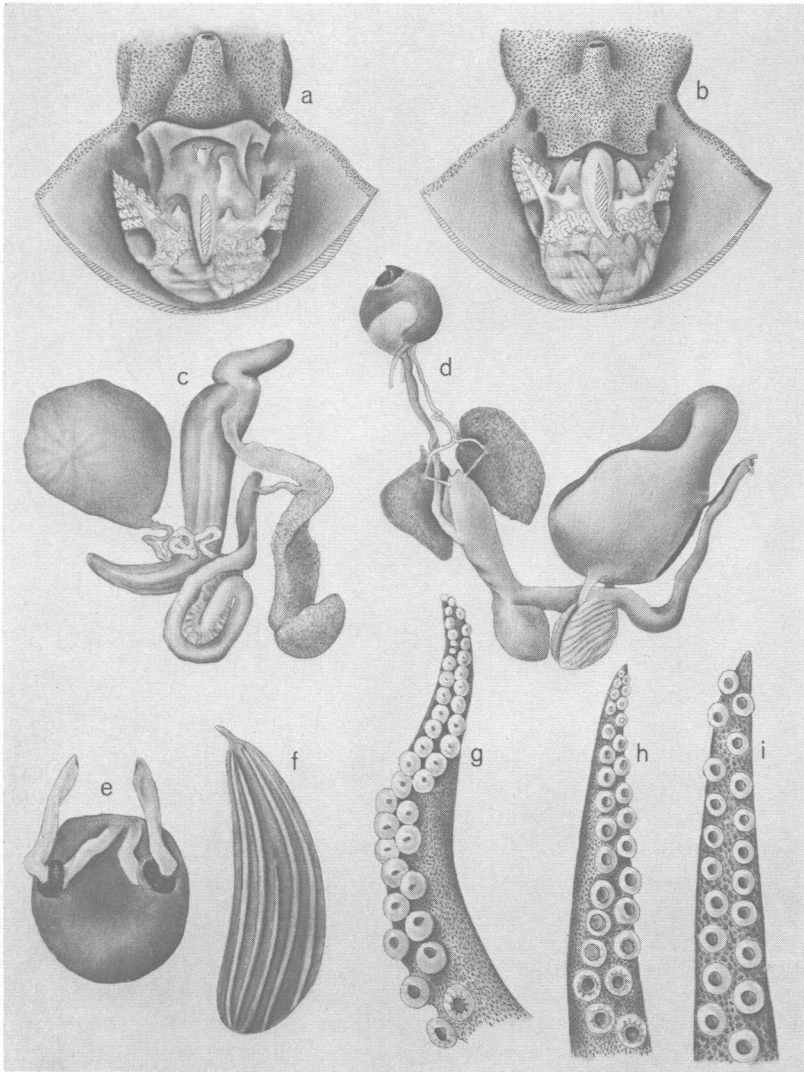


FIGURE 2. a-f, i, *Octopus zonatus*, new species: a, ventral view of viscera of holotype; b, ventral view of viscera of female from Sta. P-366; c, genitalia of male holotype; d, digestive tract of female from Sta. P-366; e, genitalia of female from Sta. P-366; f, egg from same station; i, tip of first left arm of male from Sta. P-402.—g-h, *Octopus chierchiae* Jatta: g, tip of second left arm of male from Sta. 553; h, tip of third right arm of female from Sta. 553.

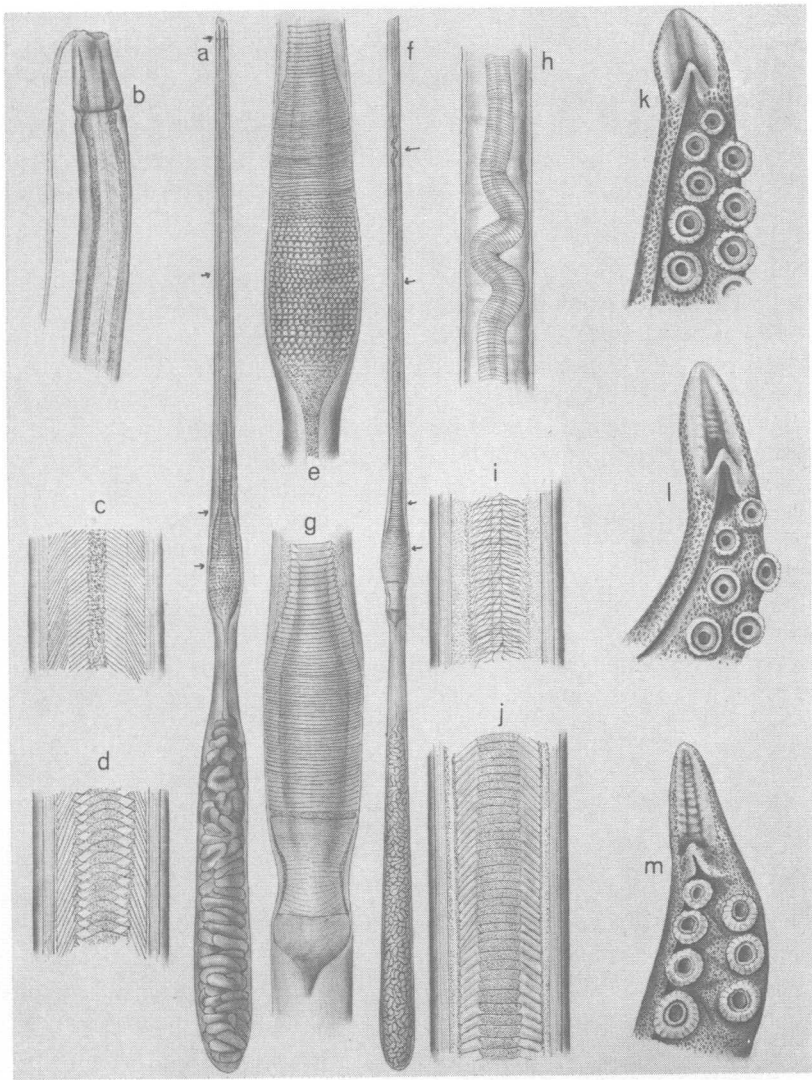


FIGURE 3. a-e, k, l, *Octopus zonatus*, new species: a, whole spermatophore; b, oral end of same; c, part of horn of same; d, part of horn near cement body; e, cement body showing scales; k, hectocotylus of male, mantle length 14.0 mm, from Sta. P-366; l, hectocotylus of male holotype, mantle length 19.0 mm, from Sta. P-402.—f-j, m, *Octopus chierchiaie* Jatta, from El Salvador: f, whole spermatophore; g, cement body; h-j, sections of horn; m, hectocotylus.

The genitalia of the holotype, a male, were dissected and are shown in the figure. The penis is large with a large diverticulum (PLI 21.6). The duct from Needham's sac leads off at about the middle. The sac was filled with spermatophores which are shown in the figures. They were large (SpLI 58.9) with a conspicuous stout sperm mass (SpMI 32.1). Immediately anterior to the sperm mass the spermatophores bend sharply. As shown in the figure, the capsule around the cement body bears a number of small scales or crochets on the inner surface similar to those found in certain elledonids. The horn is straight.

The radula and beaks were taken from the large female and are illustrated. The beaks show no distinctive characteristics; however, the radula has some unusual features. The rhachidian teeth have symmetrically arranged lateral cusps, one on each side. The seriation appears to be of the A_3 type. The first laterals are poorly developed with only a trace of an inner cusp. The second laterals have very long, slender bases and a single sharp cusp near the inner end but set back from it. The third laterals are long, slender, and curved, and the marginals indistinct.

The color in the living animal while at rest or undisturbed was a general reddish or reddish brown with darker, almost indistinguishable bandings. When touched or irritated, the general body surface blanched to a pale yellowish white or grayish white banded with distinct dark-gray or grayish-brown bands. Those on the mantle were transversely arranged; between the eyes they ran longitudinally; on the arms they formed crossbands. The specimens were photographed alive, and from these photographs and the banding remaining on the specimens the illustration was made showing the pattern.

Type.—U. S. National Museum 576513.

Type Locality.—PILLSBURY Sta. P-402, 8°51.2'N, 77°01.6'W. On bottom in 73 meters, off Punta Caribana, Colombia.

Discussion.—This is the only transversely banded octopus known from the Atlantic Ocean. Indeed, only one other known species of octopus has transverse banding, *Octopus chierchiae* Jatta, 1889, from the Pacific coast of Central America. Other species are longitudinally banded or striped on the mantle; the only other striped or banded species in the Atlantic is *Octopus burryi* Voss, 1950, which has a longitudinal band along the dorsal side of each arm. It appears that the transversely banded species of octopus must be considered American in origin.

The possibility immediately arose that *O. zonatus* might be conspecific with *O. chierchiae* from the Pacific, and superficial examination revealed little by which to separate them. Jatta's original description (1889) of *O. chierchiae* is very brief and gives very few salient characteristics. In

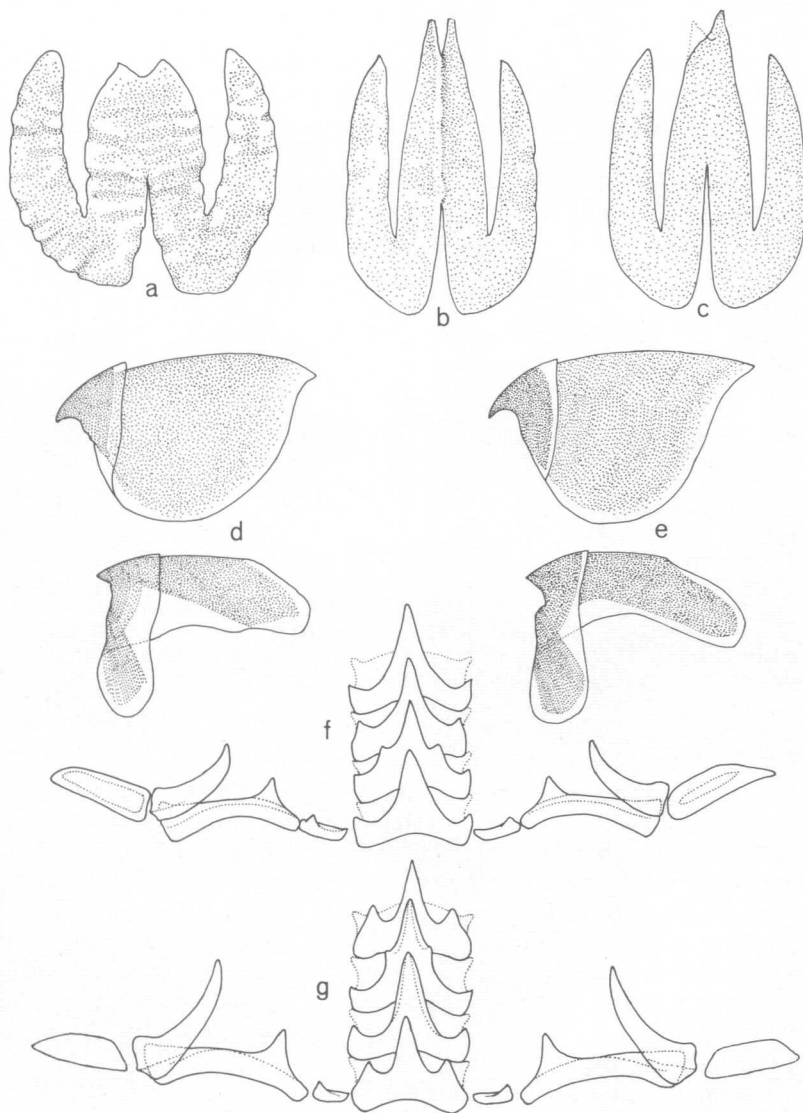


FIGURE 4. a-d, g, *Octopus zonatus*, new species: a, funnel organ of female from Sta. P-366; b, funnel organ of male holotype; c, funnel organ of female from Sta. P-352; d, mandibles; g, radula.—e-f, *Octopus chierchiae* Jatta: e, mandibles; f, radula.

1899, he redescribed and figured his two specimens from off Panamá; however, comparison of actual Pacific specimens with the description and illustration still shows several discrepancies. Jatta's illustration shows the tips of the arms in the male to be modified in an eledonid fashion, i.e., the suckers converted into long, tubular papillae. In a large male from El Salvador kindly sent to me by Dr. J. Enrique Vinatea, the terminal suckers are only slightly modified. The heads in Jatta's illustration are smoothly angled, while in the Salvadorean specimen there are knobs and rugosities. There are other differences, but a description of these must wait for detailed treatment of the Pacific Central American species now being prepared.

Octopus zonatus may be distinguished from *O. chierchiae* by means of the following tabulated differences.

| <i>O. zonatus</i> | <i>O. chierchiae</i> |
|---|--|
| 1. Color simple dark bands on a light background. | 1. Color dark bands outlined by a fine greenish-yellow line on a light background. |
| 2. One or two simple cirri over each eye. | 2. No cirri over the eyes. |
| 3. No modified suckers in the tips of the arms in the males. | 3. Terminal suckers in tips of arms of male modified into elongate, non-functional suckers. |
| 4. Cement body of spermatophores contained in a capsule internally decorated with scales, teeth, or crochets. | 4. Cement body of spermatophores contained in a capsule internally decorated with transverse ridges but no scales, teeth, or crochets. |
| 5. Third lateral teeth of radula long and sturdy. | 5. Third lateral teeth of radula shorter and broader. |

While the two species are distinct and easily separable, they are certainly closely related and must be considered to belong to the long list of twin species of marine animals originating from the former existence of a portal through Central America linking the two oceans.

O. zonatus and its twin show several features which they seem to share with the eledonids: presence of striated eggs, modifications of the suckers of the tips of the arms in the males (*O. chierchiae*), and the long slender second lateral tooth on the radula with its inward located cusp. While distinctly belonging to the genus *Octopus*, they may later be shown to be phylogenetically close to the eledonid branch.

The specific name *zonatus* refers to its banded pattern.

Octopus defilippi Verany, 1851

Octopus defilippi Verany, 1851: 30, pl. 11, figs. D, F.—Robson, 1929: 135, figs. 45-49.—Voss, 1964: 554.

Material Studied.—1 male, mantle length 20.0 mm, Sta. P-349, 8°31.6'N, 77°02.0'W, in 53-54 meters with 10-ft otter trawl, in the Gulf of Urabá,

July 11, 1966. 1 female, mantle length 14.3 mm, Sta. P-421, 9°32.1'N, 78°33.5'W, in 53-59 meters with scallop dredge, off the Golfo de San Blas, July 19, 1966. 1 female, mantle length 18.2 mm, Sta. P-434, 9°14.6'N, 80°21.8'W, in 47-49 meters with 10-ft otter trawl, in the Golfo de los Mosquitos, Panamá, July 20, 1966. 1 male, mantle length 30.0 mm, Sta. P-435, 9°08.5'N, 80°29.5'W, in 36-47 meters with 10-ft otter trawl, in the Golfo de los Mosquitos, July 20, 1966.

Four specimens of this species only recently recorded from the western Atlantic (Voss, 1964) were captured. All but one were small and rather badly damaged but the gill counts were consistently 11, which is typical for the species. They only came from soft bottom, usually muddy, associated with soft-bottom fauna. These records considerably extend the known range of this species which was formerly recorded for the western Atlantic only from the upper Gulf of Mexico and southern Florida. The characters and their variations were discussed by the writer in the paper mentioned above.

Octopus joubini Robson, 1929

Octopus joubini Robson, 1929: 161, fig. 56.—Pickford, 1945: 757.—Voss, 1956: 160.

Material Examined.—1 male, mantle length 18.5 mm (with spermatophores), 1 female, mantle length 19.0 mm (with eggs), Sta. P-392, 9°45.1'N, 76°09.1'W, in 75-79 meters with 10-ft otter trawl, off the Islas de San Bernardo, Colombia, July 16, 1966.

The two small octopods taken at this locality seem definitely referable to *O. joubini* Robson, one of the smallest species of *Octopus* in the Atlantic. Both were adults, as determined by the presence of spermatophores in the male and eggs in the female. The specimens were taken from a hard coral bottom with such invertebrates as *Colangia*, *Astrangia*, *Nicella*, *Chironophtha*, *Nidalia occidentalis*, *Diodogorgia nodulifera*, *Antipatharia*, large hydroids, many sponges, *Pecten chazaliei*, *Microcardium*, *Cymatium caribbaeum*, *Colubraria*, and dead pieces of the corals *Manicina* and *Agaricia*.

The species is known from South Florida, the Bahamas, Gulf of Mexico and lower Caribbean Sea.

Octopus vulgaris Cuvier, 1797

Octopus vulgaris Cuvier, 1797: 380.—Pickford, 1945: 708.—Voss, 1956: 159.

Material Examined.—1 female, mantle length 31.0 mm, Sta. P-330, 9°37.5'N, 78°54'W, in 128 to 64 meters with 10-ft otter trawl, off the San Blas Islands, Panamá, July 8, 1966.

This specimen, taken in a fine catch of sponges, corals, shrimp, crinoids, and crabs on hard bottom, seems referable to this species.

Benthoctopus januarii (Hoyle, 1885)

Octopus januarii Hoyle, 1885: 229.

Benthoctopus januarii, Robson, 1929: 41; 1932: 235.—Voss, 1956: 167.

(For more detailed synonymy see Robson, 1932.)

Material Studied.—1 female, mantle length 42 mm, Sta. P-374, in 377-439 meters with 40-ft otter trawl, off the Bajío Comisario, Colombia (9°57'N, 76°10.6'W), July 14, 1966.

A single female of this species was taken on the 1966 cruise. It has previously been recorded only from off Barra Grande, Brazil (HMS CHALLENGER), and the Gulf of Mexico (R/V OREGON). The R/V PILLSBURY record is from about midway of the known range for the species.

The rest of the catch at this station consisted of pancake urchins, *Phormosoma*, glass scallops, *Pseudomusium dalli*, *Hyalinoecia*, *Gaza superba*, *Columbarium*, *Verticordia elegantissima*, and the fishes *Poly-mixion*, *Steindachneria*, *Merluccius*, *Peristedion*, *Bembrops*, *Bathypterois*, *Neoscopelus*, *Yarella*, *Polyipnus*, myctophids, *Neobithites*, *Zenion*, *Cyt-topsis*, *Poecilopsetta*, bothids, *Parasudis*, *Chlorophthalmus*, *Hydrolagus*, and *Scyliorhinus*.

FAUNAL AFFINITIES OF THE SHALLOW-WATER OCTOPUS
OF THE CARIBBEAN

Four shallow-water benthic octopods are now known to occur in the southwestern Caribbean Sea: *Octopus vulgaris*, *O. defilippi*, *O. joubini*, and *O. zonatus*. All were taken by trawling on the continental shelf. The first three also occur in South Florida waters at similar depths with the additional species *O. burryi*. Since the latter species occurs in the Virgin Islands and West African waters, it almost certainly will be found in the waters covered in this report. The other four western Atlantic species of *Octopus*, *O. hummelincki*, *O. macropus*, *O. briareus*, and *O. maya*, may also be found to occur when reef and reef flat collecting has been extensively done. The first three are typical reef and reef flat animals from South Florida through the Caribbean while *O. maya* at present is known only from the peninsula of Yucatan and the Gulf of Campeche.

The distribution pattern as presently seen is as follows: *O. vulgaris*, *O. burryi*, *O. defilippi*, and *O. joubini* in moderate to shallow water on sand and mud bottom throughout the tropical western Atlantic; *O. hummelincki*, *O. macropus*, and *O. briareus* in shallow water on reef and reef flats; *O. maya* confined to the lower Gulf of Mexico and perhaps endemic; *O. zonatus* confined to the western Caribbean and forming a twin species with the Pacific *O. chierchiae*.

As this is the first report of octopus from the southwestern Caribbean, I give below a newly constructed key to the shallow-water species of octopods of the western Atlantic. It includes the new species and it is

hoped that it will prove useful to those biologists working in this interesting and still little known area. The key and its background are discussed in an earlier paper (Voss & Solís, 1966) on *Octopus maya*, and the interested reader is referred to it.

KEY TO THE SHALLOW-WATER SPECIES OF *Octopus*
OF THE TROPICAL WESTERN ATLANTIC

1. Mantle, head, and arms crossed by broad bars of chocolate brown on a light background; animals small; gills 6-7; ligula index 6-9; eggs moderate, about 6 mm long *Octopus zonatus*, new species
1. No chocolate-brown bars crossing mantle, head, and arms 2
2. An ocellus or dark spot or ring on each side of the head between the eye and the second and third arms 3
2. No ocellus or dark spot or ring present 4
3. Ocellus with a narrow blue ring within the spot; animals small; gills 6-7; ligula index 4-5; eggs small *Octopus hummelincki* Adam
3. Ocellus without a blue ring; animals large; gills 9-10; ligula index 1.4-1.9; eggs large, to 17 mm *O. maya* Voss & Solís
4. Mantle, head, and arms covered with close-set papillae; dark purplish or brownish band on dorsal side of arms; size small *O. burryi* Voss
4. Mantle, head, and arms not covered with close-set papillae; no dark band on dorsal border of arms 5
5. First arms always largest and usually longest, stoutest or coequally stoutest with second arm; animals medium to large; gills 9-13; ligula index up to 14; eggs small *O. macropus* Risso
5. Second and/or third arms longest, usually conspicuously so 6
6. Second and third arms much longer and stouter than first and fourth arms; animals medium to large; gills 6-8; ligula index 3-4; eggs large, to 10-14 mm *O. briareus* (Robson)
6. Second and third arms not markedly longer and stouter than other arms 7
7. Arms are long and slender, asymmetrical in length; mantle small; animals small to medium; gills 11; ligula index 1.8-2.5; eggs not known *O. defilippi* Verany
7. Arms not conspicuously long and slender; arms symmetrical or nearly so in length 8
8. Arms stout, moderately short; animals medium to large; gills 7-11; ligula index under 2.5; eggs small, 3 mm or less *O. vulgaris* Cuvier
8. Arms short; animals small; gills 5-7; ligula index 4-7; eggs moderately large, 5-10 mm *O. joubini* Robson

SUMARIO

OCTOPODOS COLECTADOS DURANTE EL VIAJE DEL BARCO DE INVESTIGACION
PILLSBURY POR EL SUDOESTE DEL MAR CARIBE EN 1966, CON LA
DESCRIPCION DE UNA NUEVA ESPECIE, *Octopus zonatus*

Se describe una nueva especie de octópodo rayado procedente del material colectado por el barco de investigación PILLSBURY frente a la costa del Caribe de Colombia. Se compara con la especie más próxima a ella, *O. chierchiae*, del Pacífico oriental tropical. Las descripciones están acompañadas de ilustraciones detalladas. También se reportan: *O. defilippi* Verany, *O. joubini* Robson, *O. vulgaris* Cuvier y *Benthoctopus januarii* Hoyle. Se incluye una nueva clave para los octópodos conocidos de aguas someras del Atlántico occidental.

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